## Extended Abstract for 41st Annual Conference on Bioassay, Analytical and Environmental Radiochemistry

## Title of paper:

Proposed ANSI Standard for Traceability of Radioactivity Sources to the U.S. National Institute of Standards and Technology (NIST)

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## Extended Abstract (300 words maximum):

In response to industry needs for demonstrating the traceability of radioactivity standards to NIST, a draft standard has been developed by ANSI Subcommittee N42.2. This standard provides an acceptable methodology for suppliers of radioactivity sources to demonstrate traceability to NIST. The criteria necessary for manufacturers to maintain and assure traceability are provided in the following areas: quality assurance program, facilities and equipment, participation in a NIST Measurements Assurance Program (MAP), and certificates. Specific requirements in these areas will be discussed.

The MAP program for demonstrating measurement traceability includes verification of manufacturers' products by NIST and manufacturers' calibration of blind samples distributed by NIST. Specific requirements for participation in this program including frequencies for various types of calibrations and acceptance criteria for results will be presented. The structure and history of the current MAP program for suppliers of standards to the nuclear industry will be discussed.

The current status of the standard will be reviewed along with future plans for assuring implementation through an industry sponsored accreditation program.